Draft Proposals FY 2007 OHMVR Grant Program Application
BLM CA Desert District Office

Project 1: **CDD District-wide Closed Trail Restoration Coordination**

Total Requested: $ 125,886 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Restoration Project

Proposed Project Description:
For the past three years, the California Desert District (CDD) Field Offices have embarked on numerous large-scale arid lands restoration projects to ensure sustainable OHV recreation, while preserving viable habitat for sensitive and listed species. This grant application will seek funding to continue coordination, management, and planning of these restoration projects throughout the California Desert Conservation Area (CDCA). The Bureau of Land Management (BLM) takes into account the conservation of threatened and endangered plant and animal species and the ecosystems on which they depend as it implements motorized vehicle access networks for the 7 million acres of non-wilderness public lands within the CDD. This area is rich in biological diversity and subject to increasing demand for community development, recreation, and resource utilization. One result is an increasing loss and fragmentation of species habitat.

Restoration of closed trails accelerates natural revegetation on site and helps to disguise the closed trail and effectively remove it from the network of *de facto* routes that occur throughout the CDCA in critical and potential habitat. This project will fund a position to oversee and coordinate the restoration efforts throughout the CDD and assist Field Office resource staff with applicable restoration techniques, data collection and management, site monitoring, technological capabilities, and cost-effective and biologically-significant decision making. The grant will facilitate: Research of current Best Management Practices for arid lands restoration; Identify high priority sites for restoration based on habitat, OHV use, and accessibility; Assist Field Office Staff with restoration planning; Train and support restoration field crews; Assist BLM staff with NEPA, CEQA, and SHPO requirements; Coordination of district-wide monitoring for OHV compliance and vegetation recovery at restoration sites; and Coordinated outreach efforts among OHV stakeholder groups, government agencies, partner organizations, and environmental interest groups.

Past Project Activities:
Past CDD restoration activities include:

- Training restoration crews on arid lands restoration techniques and GPS data collection.

- Analysis of restoration success based on visitor-use patterns, outreach programs, law enforcement coordination, and types of restoration activities.
- Planning for more effective communication between recreation leads, biological and archaeological inventories, and restoration crews.
- Assembling information to define the overall scope of non-wilderness restoration in recreation areas throughout the CDCA.
- Vegetation monitoring to evaluate the species recovery rate on restored sites.
- Effectiveness monitoring of restored sites to determine success rates and areas for improvement in management actions.
- Standardization of data collection procedures throughout the CDD.
- Attending OHV-related meetings with concerned stakeholders, such as the OHMVR Stakeholder Roundtable.
- Attending arid lands restoration meetings to discuss new technologies and management techniques.

Project 2: **CDD District-wide Wilderness Restoration VII**

Total Requested: $ 155,410 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Restoration Project

Proposed Project Description: The proposed project is to monitor and maintain by re-treatment, as needed, as many as 940 sites just inside wilderness boundaries that have been restored over the past six years. These sites are in 35 of the 65 BLM wilderness areas in the California Desert District. This is the second and last year of the intensive monitoring phase of the seven year CDD wilderness restoration Project. Approximately 1,400 sites in the 65 Wilderness Areas were inventoried, treated, and, in some cases re-treated in the first six years of the project.

The sites to be monitored and re-treated, as necessary, will be those sites that were not monitored or re-treated last year. These 35 wilderness areas are in the central and eastern portions of the California Desert District within Ridgecrest, Palm Springs-South Coast, El Centro, Barstow, and Needles Field Offices.

The restoration technique has evolved from site preparation treatments used to accelerate natural re-growth of native vegetation. It consists of 'pitting' or 'dimpling' the previous disturbed linear surfaces and the placement of dead vegetation and materials (vertical mulching) on that surface. The treatment extends from the wilderness boundary to the visual horizon. Such treatment creates a 'visual barrier' along the wilderness boundary onto which OHV users are less likely to drive. In conjunction with maps, wilderness boundary signing, outreach to desert users, a law enforcement presence, and fencing and other ‘hard barriers’, the maintenance of the 1,400 visual barriers will reduce the frequency of OHV incursions into wilderness.

Past Project Activities: This is a continuation of a restoration and monitoring that was performed by Wilderness Restoration Corps I thru VI. Approximately two-thirds of the contract funding for the Corps was from six Wilderness Restoration Division Grants [2000 though 2006]. In the first 5 years of the effort the emphasis was on identifying and treating 1,400 sites in 65 wilderness areas.

Last year, 461 sites that had been previously treated in 30 wilderness areas were monitored. Analysis of the monitoring data is still preliminary. Approximately 20% of the sites were in washes that cannot effectively be treated by the pit and mulch restoration technique. Vehicle incursions were disproportionately high in washes. Approximately two-thirds of the washes were raked out for an appropriate re-treatment. No vehicle use appeared in 70% of the sites outside of washes and most of the use was light or several years old. Thirty-five of the remaining sites that had substantial use were treated. Approximately ten of the sites had characteristics not appropriate for treatments by hand crews using hand tools. These will require constructed barriers or mechanical ripping. The data will be provided to Field Offices in more comprehensive detail than in the past. This information will allow BLM to implement, for example, more intensive treatments or more precisely focused outreach and law enforcement efforts. Considerable support from citizen volunteers from a variety of groups on selected restoration projects has strengthen the wilderness restoration efforts.

A critical lesson learned from last year's intensive focus on monitoring is that a two-person crew plus lead is too small. While two is optimal for monitoring, it is too small to fully perform some re-treatments. For this reason, the proposal is for a crew of four that can function as a four person re-treatment crew or two two-person restoration monitoring crews.

Project 3: **Juniper Subregion Riparian Monitoring**

Total Requested: $ 16,668 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Conservation Project

Proposed Project Description:
The controversy over vehicle use in the Juniper OHV Subregion of the West Mojave Desert was partially resolved with the signing of the Record of Decision for the West Mojave Plan. Motorcycles were prohibited from the Juniper Flats Area of Critical Environmental Concern and all other routes were designated as open, limited or closed to vehicular traffic. A commitment was made to restore closed routes. Of particular concern were the routes crossing three riparian areas in Arrastre, Grapevine and Lovelace canyons. A limited number of routes were designated as open so that connections could be made between touring routes in the Juniper Subregion.

OHV use of this area has increased dramatically in the past five years. Many unauthorized trails are present. The Barstow Field Office has begun a restoration

program, using OHVMR Division grant funds. Signs are being put in place indicating the open routes of travel. Closed routes are being disguised or blocked.

It is imperative that BLM monitor and evaluate impacts of the use of these routes crossing riparian habitat. This grant proposal would provide funding for bird surveys in the canyons and compliance monitoring of the open and closed routes. The surveys will include time to evaluate protection of nesting areas for birds of prey and the potential occurrence of the listed species, the least Bell's vireo and the southwestern willow flycatcher. In addition, limited survey time is allocated for surveys of the endangered arroyo toad and the special-status upland bird, the gray vireo.

Compliance monitoring will include observing the vehicle use of open and closed (restored) routes. These results can be used to assist with additional restoration, if needed, and site-specific recommendations for actions to reduce erosion, make small re-routes or utilize other adaptive management techniques to provide a safer and more environmentally sound trail system near the riparian habitats.

Past Project Activities:
BLM contracted bird surveys in Grapevine Canyon and Arrastre Canyon in 1991. These surveys did not detect nesting threatened or endangered species, but showed a high diversity of neotropical migrants used the canyons for both nesting or transitory habitat. BLM staff evaluated Arrastre Canyon as habitat for listed species, including arroyo toad, least Bell's vireo and southwestern willow flycatcher in 2003. None of these species were located.

Juniper Subregion has been recovering from the Willow Fire of 1999. The riparian growth in the canyons has been particularly strong in the past two years. Several areas appear to be suitable habitat for the listed bird species and may have become colonized recently.

BLM received a 2006 report that arroyo toads had been found in a tributary of Arrastre Creek within the San Bernardino National Forest about one mile south of the BLM-Forest Service boundary. This raises the possibility that the endangered arroyo toad could occur on BLM lands in an area of relatively high OHV use. This sighting requires confirmation.

Although the Devil Fire of 1994 and the subsequent Willow Fire destroyed many of the habitat features for the gray vireo, which prefers chaparral and pinyon-juniper woodland, some areas within the Juniper Subregion escaped the flames, and others have recovered fairly well.

Public interest in the juniper subregion is high, and BLM has received many comments on management of this area from landowners, local and nearby residents, environmental groups, OHV user groups and others. Effectiveness monitoring will inform BLM and the public about the success of the restoration and management measures now in place and the ongoing activities.

The Friends of Juniper Flats, Sierra Club and a group of motorcycle riders has assisted BLM in monitoring and cleanup projects at Juniper Flats. BLM intends to partner with these groups to achieve a safe and environmentally sensitive recreation condition in the Juniper subregion.

Project 4: **Raptor Nest Monitoring**

Total Requested: $ 76,560 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Conservation Project

Proposed Project Description:
The Ridgecrest Field Office will soon be undertaking a collaborative process for designating routes of travel in the El Paso Mountains and Ridgecrest OHV Subregions, as described in the West Mojave Plan. Recreational use of these two subregions is extensive. The El Paso Mountains and Red Mountain are also termed Key Raptor Areas by the California Desert Conservation Area plan, and are part of a network of 232 such areas on lands managed by BLM in the western United States.

The West Mojave Plan specified that site-specific criteria would be applied to protection of raptor nests adjacent to open routes of travel. The line of sight from the nest to the vehicles using the road is a more important determinant of disturbance effects than a standardized protective distance, such as ¼ mile.

This grant proposal would employ contracted biologists from a non-profit partner to inspect each nest site located in the 2005 helicopter surveys and in the California Desert District database. These on-the-ground surveys will be utilized to evaluate the disturbance potential of each golden eagle and prairie falcon nest from OHV use, and recommendations will be made for the routes of travel adjacent to each nest site.

Past Project Activities:
The Ridgecrest Field Office contracted helicopter surveys of the El Paso Mountains, Summit Range, Lava Mountains and the southern Sierra Nevada Mountains in 2005 to determine the location of active raptor nest sites. An on-the-ground inspection of these sites is needed to determine nesting activity and productivity and the relationship of the nest sites to routes of travel.

The Barstow Field Office contracted helicopter surveys to determine locations of raptor nests in the Johnson Valley and Stoddard Valley open areas and surrounding OHV subregions in 2004. A subsequent grant was awarded by the OHMVR Division in 2006 to provide on-the-ground inspection of these nests.

The California Desert District compiled all locations of golden eagle and prairie falcon nest sites as part of the inventory for the California Desert Conservation Area Plan of

1980. This historical database has been updated occasionally as new locations are detected or observations are made of nest success by Field Office biologists.

The long-term intent of these conservation projects is to provide protection of important raptor nest sites within an OHV recreation setting.

Project 5: Desert Tortoise Monitoring
Total Requested: $ 202,880 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Conservation Project

Proposed Project Description:
The BLM has conducted long term studies of the desert tortoise at selected study plots since 1978. The information on the number of tortoises on these plots, their productivity, tortoise health and movements, has been a major contribution of the agency to the rangewide understanding of the status of this threatened species. The study plots are monitored by the United States Geological Survey, Biological Resources Division, under the direction of Dr. Kristin Berry.

This grant would continue the research on desert tortoise populations in high use recreation areas. Focused studies would be conducted on tortoise densities in the Chemehuevi Wash open wash zone using one hectare plots. These counts would be calibrated by re-censusing the Chemehuevi Wash permanent study plot. This methodology has been used and supported by the OHMVR Division in past grants covering the Jawbone Canyon open area and the El Mirage recreation area.

Results of this study could be used to direct vehicular traffic away from the higher-density desert tortoise population in the Chemehuevi Wash complex. At present BLM and the public have no way of knowing which tributaries or branches of this complex wash system are the most suitable for vehicular traffic and which would be best protected as tortoise habitat.

The Chemehuevi Wash area has seen an increase in the incidence of disease, resulting in lowered desert tortoise populations. A current census of the wash complex and the permanent study plots would place the current status of the populations in perspective with the rest of the California Desert.

Past Project Activities:
The USGS conducted similar studies of the desert tortoise for BLM, funded by the OHMVR Division, in 2004 and 2005. Partial funding for similar plots in the El Paso Mountains area was received in 2006.

The U. S. Fish and Wildlife Service sponsored surveys of desert tortoise populations using a different methodology, for the past five years. The line-distance method, has less precision for predicting density, and is of less specific use to land managers for

making decisions relevant to OHV area management. These surveys will also assist the fish and Wildlife Service in correlating the different methodologies.

Project 6: Mohave Ground Squirrel Trapping.

Total Requested: $ 35,500 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Conservation

Proposed Project Description:
The West Mojave amendments (2005) to the California Desert Conservation Area Plan focus Bureau of Land Management efforts to conserve species of management concern in the West Mojave Desert. One of the central species for BLM conservation actions under the West Mojave Plan is Mohave Ground Squirrel (MGS), a special status species for the BLM in California and a species listed as threatened by the California Department of Fish and Game. The goals for MGS in the selected alternative of the West Mojave Plan are to ensure the long-term protection of MGS habitat and populations throughout the species range. Habitat management is the major factor in BLM work to ensure viability. Research on specific habitat variables affecting long term viability is essential to the adaptive management strategy of the West Mojave Plan.

For calendar year 2005, the California Department of Parks and Recreation, Off-Highway Motor Vehicle Division and its Commission granted BLM $82,000 to create a range-wide implementation plan for Mohave ground squirrel conservation with partner governmental agencies, universities, and non-governmental organizations. The second task was to establish permanent plots for monitoring MGS at key sites in the resource area covered by the BLM Ridgecrest Field Office. The focus was on historically important population “hot spots” on BLM lands near Ridgecrest and Inyokern, Kern County.

Following up in 2007, the BLM California Desert District is asking for funding that supports trapping studies to determine the extent of MGS populations in the Ridgecrest and El Paso Mountains OHV subregions. Data obtained from these trapping studies will assist the BLM in route designation in the Collaborative Access Planning Area.

Past Project Activities:
Protection of the Mohave ground squirrel has become a higher priority since the U. S. Fish and Wildlife Service received a petition to list this species as threatened or endangered in 2005. The Desert Managers Group has convened a working group to discuss protection issues and the need for additional research. Participants from the military (Edwards Air Force Base, China Lake Naval Weapons Center, Fort Irwin National Training Center), the BLM, the California Department of Fish and Game and the Defenders of Wildlife are preparing a conservation strategy intended to prevent the need for listing as threatened or endangered. Outside scientists have been consulted for expertise on detection methods, potential use of population modeling and ways to

define habitat based on vegetation components. A workshop is planned for fall, 2006, to bring together experts and agencies to contribute to the conservation strategy.

The many trapping studies conducted by agencies and development interests as part of the environmental review of specific projects have not been very useful for defining the overall conservation needs of the Mohave ground squirrel. In particular, a gap in existing information on distribution exists in the vicinity of the El Paso Mountains. This is the same area where regional planning for OHV access is soon to begin.

Project 7: Planning- Revision of Desert Tortoise Natural Area Plan.

Total Requested: $ 25,440 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Non CESA Project

Proposed Project Description:
The Desert Tortoise Research Natural Area is the only region in the California Desert Conservation Area dedicated to the protection of the threatened desert tortoise. The BLM manages public lands within the boundaries as an Area of Critical Environmental Concern. It lies within a high-use off-highway vehicle landscape, with the popular Rand Mountains on the northeast, the extensive traditional riding and staging areas of California City on the south. The private lands surrounding the DTNA receive heavy use, and the publicly-owned lakebed of Koehn Dry Lake is open to vehicle use.

The management plan for the DTNA was published in 1988, prior to the listing of the desert tortoise as threatened in 1989. The joint BLM and California Department of Fish and Game (CDFG) planning document is seriously outdated. Activities of both agencies and the non-profit partner, the Desert Tortoise Preserve Committee, have resulted in fencing of the boundaries, acquisition of additional lands and removal of invasive weeds. Both the desert tortoise and the state-threatened Mohave ground squirrel have been censused and monitored on an irregular basis.

The pressure for vehicle recreation in this area has resulted in several intrusions through cuts in the perimeter fence, and adjacent areas now slated for acquisition receive heavy OHV use. Updating of the management plan will hasten the ability of the agencies and non-profit partners to complete acquisitions, educate the public on appropriate places to ride and authorize restoration activities.

Past Project Activities:
The Desert Tortoise Preserve Committee has prepared a management plan and updated it annually for the lands where it works to protect the desert tortoise. In 2002, the DTPC compiled this information into a concise document. Therefore, a great deal of the work in the proposed planning grant has been completed. BLM and CDFG have

been unable to review and incorporate the provisions of area management into a revised and updated document.

The DTNA serves as a focal point for education of desert users, particularly off-highway vehicle riders. During the spring, 25 visitors per day come to the Interpretative Center, and about half see a desert tortoise in the wild while exploring the trails. The Desert Tortoise Preserve Committee has employed a naturalist at the Interpretive Center since 1989, allowing the public to receive guidance and answers to their questions about tortoise protection, legal places for off-highway vehicle recreation and land ownership in the area.

Project 8. Strategic Prioritization and Scheduling for Restoration of OHV-Impacted Desert Sites, 2007-2016

Total Requested: $ 57,507.
Detailed cost information is available on the Project Cost and Deliverables (PCD) Spreadsheet that accompanies this document.
Restoration Project

Purpose
This project responds to a request from members of the OHMVR Commission to provide a roadmap for institutional needs on the part of BLM to accomplish ecosystem restoration on public lands where OHV travel and recreation take place in the arid land ecosystems of southeast California.

Proposed Project Description
1. Model and quantify spatially human use anticipated by way of mechanized recreation and travel on BLM public lands in the California Desert District and in the California portion of the Lower Colorado River District for the period 2007 to 2016.

2. Assemble information on environmental factors (biological diversity, biological and geological uniqueness, soil erosion), considerations of environmental risks and conflicts (proximity to human communities and other land management agencies, fire frequency, military operations), and watershed analyses along GIS map layers of landscape ecology metrics (e.g., fragmentation, edge to area ratio, slope, aspect) to ascertain BLM lands of greatest resource values and at greatest risk – and thus in greatest need of restoration in landscapes where sustainable OHV recreation and travel is occurring.

3. Develop criteria for prioritizing and scheduling restoration of the most significant sites (recreationally, biologically, geophysically) on public lands in the Mojave and Sonoran deserts in California.

4. Delineate the most significant restoration sites, watersheds, and landscapes (i.e., sites at different scales) in greatest need of attention for ecological restoration so that those areas continue to remain accessible to sustainable OHV travel and recreation.

5. Develop a schedule for restoration projects for the coming decade that gives explicit cost estimates and approximate acreages and miles of unauthorized routes closed or restored annually by location.

6. Identify natural resource information and technology that could significantly accelerate desert restoration and increase the long-term success rate of desert restoration where OHV recreation and travel

7. Develop a human resources plan for individual BLM field offices and for human communities near BLM public lands to (1) institutionalize greater expertise at BLM for restoration ecology and its applications in land management; and (2) develop community knowledge and technical support locally to accomplish the professional work of ecosystem restoration on BLM public lands.

Past Project Activities
This is a new project based on the need for better information to plan for future restoration projects and planning. Past activities that relate to this grant component are: Analysis of the GIS information needed to evaluate the scope of restoration in the Desert District; Standardized data collection for ground-truthing of existing designated route GIS inventories; Data collection to analyze visitor use patterns and potential future use patterns; Analysis of past restoration projects to discern labor and other possible constraints; and identification of designated critical habitats and their relation to OHV recreation.

<u>Project 9:</u> Monitoring of Mojave Fringe-toed Lizards.

Total Requested: $ 91,700 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Conservation

Proposed Project Description:
OHV recreation often occurs in desert dune ecosystems on BLM lands in California. The long-term effect of OHVs on desert dunes has become important to land managers because of uncertainty about effects of OHVs on endemic plants and animals. Concerns about dune endemic species have prompted litigation against BLM from conservation groups and from recreation groups. The Mojave fringe-toed lizard (*Uma scoparia*) is receiving particular attention from biologists, conservation advocates, and resource managers. A petition to list one population segment from the Dumont and Ibex dunes and from Kingston Wash as threatened or endangered has been received by the U. S. Fish and Wildlife Service. Kingston Wash is part of the route traversed by the Los Angeles to Barstow to Las Vegas dual sport ride.

BLM resource managers in California portions of the Mojave Desert currently have little information about the impacts of OHV recreation on populations of the Mojave fringe-

toed lizard. The California Department of Fish and Game ranks the Mojave FTL as a species of special concern and the BLM ranks this species as sensitive.

This grant request seeks to continue the work of BLM and its partners in obtaining baseline data on population size, distribution and microhabitat preferences of the Mojave fringe-toed lizard. Information collected to date has been particularly valuable in defining the specific regions of a dune complex or wash system that support occupied habitat. These OHMVR studies also serve as a baseline for population size at several sites, both undisturbed and those used for OHV recreation. The work would take place in the jurisdiction of the Barstow and Needles Field Offices.

Past Project Activities:
Previous work on fringe-toed lizard monitoring in the Imperial Sand Dunes found that population densities of the Colorado Desert species were higher in non-OHV riding areas than in the adjacent North Algodones Dunes Wilderness. In addition, populations in the dunes were substantially higher than those at sites with scattered blowsand deposits. In contrast, findings for the Mojave fringe-toed lizard showed that this species prefers areas with established vegetation, rather than bare dune deposits.

Monitoring for fringe-toed lizards is an important effort to ensure that motorized recreation remains sustainable in desert dune ecosystems. Population trends at high-use sites and control sites can inform appropriate management measures. The Kingston Wash area, where OHV dual sport events are held, is in particular need for monitoring of the lizard habitat and populations.

This project does not rely on volunteer participation because of the possible political sensitivity of the data to be collected. Instead, BLM is working with its university partner, the California State University at Fullerton, which maintains the Desert Studies Center at Zyzzyx in the heart of the range of the Mojave fringe-toed lizard.

Project 10: **OHV Safety & Education- Desert Managers Group Desert Tortoise Education Project**

Total Requested: $ 90,000 (Detailed cost information available on Project Cost and Deliverables (PCD) Spreadsheet in a separate document)
Project Type: Conservation

Proposed Project Description:
The DMG is a partnership of Federal, state, and local government agencies working together to protect and manage the California deserts through desert conservation, visitor services, and public safety efforts. The partner agencies in the DMG are the USGS, NPS, BLM, FWS, California Department of Parks and Recreation, the California Department of Transportation, the California Department of Fish and Game, all four branches of military service, and San Bernardino, Kern and Imperial Counties.

The Federally threatened desert tortoise is a highly prominent listed species in The California deserts. The tortoise, which occurs over large portions of the desert, is a significant factor affecting public land use and access, including OHV recreation, in many areas. Declines in desert tortoise populations stem from multiple factors, some of which relate directly to human activities in the desert. For example, illegal or unauthorized OHV use in the desert is a serious threat to desert tortoises and tortoise habitat in many areas. Currently, BLM and other land management agencies allow limited-route OHV access within much of desert tortoise critical habitat. However, continued access will depend on people's compliance with rules and regulations for OHVs and specifically on restricting their activities to open roads and trails.

In addition, human activities have led to increases in the numbers of common ravens and free-roaming or feral dogs, both of which prey on desert tortoise. People also collect tortoises for pets - another factor that directly reduces the number of tortoises in the wild. Pet tortoises may serve as vectors for diseases when people release the tortoises back into the wild. To effectively address all these issues, the public must understand how people's activities are contributing to the decline of desert tortoise populations in the wild. People must learn first to understand and be willing to change their behavior to avoid harming desert tortoises.

In 2004, the DMG developed and approved a three-year Desert Tortoise Information and Education Project to inform people about the value of the Desert Tortoise and ways that people's actions can contribute to successful recovery of Desert Tortoise populations in the California deserts. DMG received funding from the National Fish and Wildlife Foundation (NFWF), National Park Service, California Department of Fish and Game, and the OHMVR Commission to implement the first year of the project. This funding request represents activities in year two of the project.

Past Project Activities:

The DMG Desert Tortoise Outreach program has realized the following accomplishments to date in the pursuit of the Desert Tortoise Information & Education program. Many other projects are in progress.

1. In partnership with Defenders of Wildlife, the Tortoise Outreach Workgroup developed and published *You're in Desert Tortoise Country* brochure in October 2005. The brochure was widely popular with recreationalists and desert residents alike and a 20,000-copy reprint was ordered in spring, 2006.
2. Launched Mojave Max desert tortoise education program in California in fall, 2005.
3. Hosted a teacher's workshop to plan desert tortoise curriculum activities and developed and pilot-tested classroom desert tortoise activities
4. Wrote and released a series of press releases and radio public service announcements (PSA) about desert tortoise issues. Media releases and PSAs appeared in a wide range of print and radio media throughout southern California.

5. Contracted with Colorado State University for the development and implementation of a formal social science survey of the knowledge and attitudes of southern California desert residents and recreation users about desert tortoises and tortoise conservation. The initial phase of the survey is in progress with an initial summary due early in 2007.
6. Planned, wrote, designed, and printed Tortoise Tracks, a newsletters targeted at opinion makers and agency professionals about desert tortoise conservation issues. The first issue is in press as of mid-June 2006.